

## **REMARKS**

In the final Office Action mailed November 17, 2006, claims 1-23 and 43-51 were rejected under 35 U.S.C. § 103(a) as being unpatentable given Fera in view of Ginter et al (U.S. Patent No. 5,892,900; hereinafter “Ginter”). Applicants traverse and respectfully request reconsideration. Prior to discussing the merits of the rejection, a brief review of the teachings of both Fera and Ginter may be instructive.

The Fera reference is directed to an apparatus and method for managing a fleet of mobile assets such as trains or other vehicles. Fera describes a system that utilizes, for example, locomotive fault detection sensors that are onboard the locomotive and a communication system that allows the downloading of the fault information from the sensors through a data link to a data center. (Fera, page 5, line 6 – page 6, line 9) Notably, the data received from the sensors is sent directly to and stored in a database residing in a data center. (Fera, page 5, lines 16-19, 24-25) A web based system utilizes multiple web pages that are updated to reflect the performance reports, operating statistics of the locomotive, current location map for the fleet of mobile assets, and other information stored in the database. (Fera, FIG. 2, blocks 39, 48 & 56) Based on analysis of the information thus stored (Fera, FIG. 2, blocks 48 & 58), the web interface may also include service (i.e., maintenance) recommendations 60. (Fera, page 8, lines 6-8) In this regard, it is noted that the “services” referred to by Fera concern services that are performed on the mobile asset, e.g., maintenance or repair operations. Additionally, the web interface may also provide “information regarding services that are available 64 . . . that may be important to any decision regarding a maintenance recommendation 60.” (Fera, page 8, lines 17-19)

In contrast, the voluminous Ginter reference, in relevant part, concerns the provision of a “virtual distribution environment” (VDE) that may be used to distribute electronic content in a secure and reliable manner. (col. 2, lines 19-32) To this end, Ginter provides detailed recitation

of the structure and function of “nodes”, i.e., electronic appliances such as computers, that give rise to a “general purpose, configurable, transaction control/rights protection solution for users of computers, other electronic appliances, networks, and the information highway.” (col. 2, lines 29-32) As best illustrated in FIG. 8 of Ginter, each “electronic appliance” is provided with a “Rights Operating System” (ROS; col. 63, lines 28-34) that, much like a typical operating system, provides “basic functions” related to the “VDE information security control information, components and protocols” that hide the complexities and implementation differences of the underlying hardware platform. (col. 80, lines 10-21) Operating as a distributed processing environment (col. 83, line 38), ROS implements “services” that are linked together using a “remote procedure call” (RPC) request structure between different entities. (col. 83, lines 21-25) In this manner, ROS can create “component assemblies” or applications that draw upon “structures” provided by different entities within the system. (col. 91, lines 26-67) More specifically, ROS uses a number of defined “elements” to assemble such component assemblies (col. 92, line 63 – col. 93, line 4) including “load modules”, which constitute “basic instructions” for operating the electronic appliance (col. 93, lines 18-23; col. 94, lines 12-36).

Referring now to the instant rejection of claim 1, it is asserted that Fera teaches receiving, by a digital identity instance representative of an object, object related information (ORI) *targeted to a service* to the extent that Fera teaches the monitoring of sensors on objects (e.g., locomotives) and the provision of such sensor data to a centralized data base 39, citing page 5, lines 9-21 and page 8, lines 4-10. However, review of the cited portions of Fera reveal that, contrary to the assertion otherwise, the ORI provided to Fera’s centralized data base is not targeted to a service as presently claimed. Indeed, the only connection between the ORI and any “service” taught by Fera is notifying a maintenance service of the existence of a fault, which

fault is identified only after analysis of the previously-provided ORI. (FIG. 2, blocks 39, 48, 58 & 60) Stated another way, the ORI of Fera is not specifically targeted to any service, but instead involves a “service” only after analysis reveals the existence of a fault within the object performance.

It is further asserted, regarding claim 1, that Fera teaches “sending the object-related information to the service” at page 14, lines 3-11 and FIG. 5. Once again, however, review of the cited portions of Fera demonstrate that ORI is never sent to the “service”. At most, a “fault”, identified based on an analysis of the ORI, is provided to the “service.” (FIG. 5, blocks 128, 134 & 135; page 13, lines 1-9; page 13, line 23 – page 14, line 11) Thus, to the extent that Fera fails to teach receiving ORI targeted to a service and sending ORI to the service, Applicants respectfully submit that Fera is an inadequate basis for establishing the prima facie obviousness of claim 1, which claim is therefore in condition for allowance.

Further still, Examiner has correctly noted that Fera fails to teach the digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance or a services registry that lists available services for the object based on the at least one service module associated with the digital identity instance. Given this, Ginter has been cited as teaching these limitations. Applicants respectfully submit that Ginter does not teach these limitations.

As noted above, the “service modules” of Ginter are akin, if not essentially identical to, the services typically provided by a computer’s operating system. It is further noted that Ginter is wholly unrelated to and silent on the topic of processing of object related information. Thus, while Ginter’s “service modules” may be used to create “component assemblies” for performing useful functions such as establishment of agreements between parties (col. 91, lines 26-56),

Ginter fails to teach that any collective instantiation of such “service modules” may act as a proxy for an object. Thus, to the extent that Ginter also fails to teach the limitations not taught by Fera, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish *prima facie* obviousness of claim 1.

Assuming for the sake of argument that Ginter does in fact teach these limitations, Applicants respectfully submit that a person having ordinary skill in the art would not be motivated to combine the Fera and Ginter references because the “services” of Fera and Ginter are unrelated to each other. As noted above, the “service modules” taught by Ginter are executable code or instructions that relate to basic functions for controlling operation of Ginter’s electronic appliances. Ginter is wholly unrelated to and silent on the topic of the processing of object related information, much less the use of digital identity instances (defined by instantiations of one or more service modules) as proxies for objects. In contrast, the “services” provided by Fera are unrelated to functions performed *on behalf of an object* (i.e., in a proxy fashion, as presently claimed), but instead relate to operations that may be performed *on the object*, i.e., maintenance functions. One of ordinary skill in the art would not be motivated to “allow the digital identity instance in Fera’s teaching to include [Ginter’s] service modules for performing services accordingly as taught by Ginter for easy execution of [Ginter’s executable instructions]” because the operating system-like basic functions of Ginter are no more related to the provision of services that could be performed on an object than the typical “services” provided by a computer’s operating system. In short, one would not be motivated to combine Ginter’s service modules because they are unrelated to the “services” provided by Fera and would not further the provision of services to, much less on behalf of, an object. For this reason, Applicants again respectfully assert that claim 1 is in suitable condition for allowance.

With regard to claims 2-7, Applicants note that these claims are dependent upon independent claim 1. Because claims 2-7 incorporate the limitations of claim 1, Applicant respectfully submits that Fera in view of Ginter does not obviate the patentability of claims 2-7 for at least the reasons presented above with regard to claim 1. Therefore, Applicant respectfully submits that claims 2-7 are in suitable condition for allowance. Furthermore, the various dependent claims add novel and nonobvious subject matter.

For example, instant claims 4 and 5 recite sending ORI to a service based on location information regarding the service, which location information may correspond to another content bank system. As noted above, the reference to page 14, lines 3-11 and FIG. 5 of Fera fails to teach sending ORI to a service, much less doing so based on location of the service or where the location of the service corresponds to another content bank system.

Instant claim 7 recites verifying access rights of the source to provide the ORI to the content bank system. In contrast, the cited portion of Fera (page 10, lines 1-15) does not teach that the access rights of the *source of the ORI* are verified, as presently claimed, but rather that the rights of entities seeking to access the stored ORI are verified.

Referring now to independent claim 8, Applicants first note that the arguments presented above regarding claim 1 and the shortcomings of Fera in view of Ginter apply equally to claim 8 to the extent that claim 8 also recites a digital identity instance acting as proxy for the object and defined by instantiations of at least one service module associated with the digital identity instance or a services registry that lists available services for the object based on the at least one service module associated with the digital identity instance.

Furthermore, Applicants dispute the assertion that Fera teaches a service providing ORI to a third party. Indeed, to the extent that the “service” taught by Fera concerns operations that

may be performed on an object, rather than on its behalf, it is clear that the “service” of Fera does not provide object related information to anyone. The cited portion of Fera (page 14, lines 3-22 and FIG. 5) does not teach ORI being provided to a third party by the service, but rather that suggested responses to fault information (developed by analysis of ORI, as noted above) may be provided to an operator of Fera’s system, and that data concerning cargo in “mobile assets” may be processed to develop information that is distributed via a network, rather than a “service”. For these reasons, Applicants respectfully submit that the combination of Fera in view of Ginter fails to establish *prima facie* obviousness of claim 8, which claim is therefore in suitable condition for allowance.


With regard to claims 9-23, Applicants note that these claims are dependent upon independent claim 8. Because claims 9-23 incorporate the limitations of claim 8, Applicant respectfully submits that Fera in view of Ginter does not obviate the patentability of claims 2-7 for at least the reasons presented above with regard to claim 8. Therefore, Applicant respectfully submits that claims 9-23 are in suitable condition for allowance. Furthermore, the various dependent claims add novel and nonobvious subject matter.

For example, instant claim 9 recites receiving a request for ORI in which the request specifies the third party as the destination of the ORI. FIG. 9 of Fera is recited as teaching this limitation. However, Applicants note that FIG. 9, as shown and described on page 19, lines 1-7, concerns a web page used by Fera’s service personnel to identify proximity of a train to a service shop. Similarly, it is asserted that FIG. 9 of Fera teaches the limitation recited in claim 13 of receiving a request from *another* third party specifying the first third party (i.e., the third party recited in claim 8) as the destination for the ORI. Once again, FIG. 9 and the associated description thereof teach no such thing.

Applicants respectfully submit that the claims are in condition for allowance and respectfully request that a timely Notice of Allowance be issued in this case. The Examiner is invited to contact the below listed attorney if the Examiner believes that a telephone conference will advance the prosecution of this application.

Respectfully submitted,

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